THE WAR AND TRANS-PACIFIC SHIPPING

Ocean freight rates are popularly said to be determined by demand and supply—that is, by the ratio between the freight offered for shipment and the vessel tonnage available for carrying this freight. As competition is a very potent force in water transportation, this ratio constantly changes with variations in the movement and volume of trade and in the enlargement or contraction of available vessel tonnage. The phenomenal rise of ocean freight rates since the outbreak of the present European war has been due in the main to the withdrawal of the great mercantile fleet of Germany from ocean commerce and the requisition of a large proportion of the better class of mercantile tonnage for war purposes by the allied governments. And the destruction of vessels by submarine activity has contributed its share to the increase in ocean freight rates.

Some marked changes in the nature of trans-Pacific trade and shipping have been wrought by the rise of transportation costs on ocean highways. The trade of China has had need of more vessel tonnage than before the war, and thousands of tons of Chinese products offered for export have been unable to find space, while corresponding amounts of imports could not be booked because of the lack of vessel tonnage. Shipment of American lumber and flour is seriously limited, if not rendered impossible, with present freight rates. The export of American kerosene to China is materially reduced because of a hundred per cent increase in price, due to the rise of transportation costs.[1] Complaints of lack of space and high freight rates are also made in the Philippines and in Australia.[2]

Before the war freight rates across the Pacific Ocean were among the lowest for any similar haul in the world. Competition from Japanese subsidized lines made it practically impossible for other concerns to remain in the trans-Pacific service without the financial support of or actual ownership by American railroad companies. The Pacific Mail Steamship Company, by far the most important of the American trans-Pacific lines, was controlled by the Southern Pacific Company. The Great Northern Steamship Company operating the largest steamer flying the American flag (the Minnesota) was owned by the Great Northern Railway

[1] Bureau of Foreign and Domestic Commerce, Miscellaneous Series, No. 44, p. 7.

[2] Daily and Consular Trade Reports, 1915, No. 95, p. 386.

Company. Neither of these companies can be said to have been a financial success during the years immediately preceding the war. Charges in the coasting trade in the Orient were such that most of the coast shipping companies had difficulty in staying in the business. On the Chinese coast, British and other lines were restricting their services, passing dividends, and even selling ships and withdrawing from trade.[3]

Even before the war, then, British and American shipping was feeling the effects of Japanese competition, which was intensified by the government's policy of granting special subsidies to the great line companies. These companies were slowly increasing their proportion of the total trans-Pacific trade. A very small part of this trade was carried in tramp vessels.[4] The principal reason for the insignificant role played by the tramps was that the freights offered line vessels were distributed with fair uniformity throughout the year and exhibited no great fluctuations from one year to another. This comparative uniformity enabled the Pacific conference, to which the line companies—American, British and Japanese—belonged, to keep the tramp for the most part out of the trans-Pacific trade. The potential rather than the real competition of the tramp, however, kept freight and passenger rates low. Trade was steady, but rates enabled British, American, and German lines to live only at "the minimum of subsistence."

The outbreak of war reduced the vessel tonnage of the Pacific at a time when the freights offered for shipment showed a marked tendency to increase. Readjustments in shipping, on account of the mercantile tonnage taken from the ordinary channels of trade, favored Japan, which was far from the scene of belligerent activities. This country experienced an increased demand for its products, and, being well equipped to supply munitions of war, developed a great trade. Its large mercantile marine was obliged to devote the major portion of its facilities to assisting Japanese

[3] Daily Consular and Trade Reports, 1914, No. 284, p. 1017.

[4] The writer was informed by the foreign department of the San Francisco Chamber of Commerce that in ordinary times about 2 to 5 per cent of the freight passing in and out of that port is carried by tramps. The term "tramp" is here used to designate a vessel operating over no regular route and with no regular schedule of sailings. A chartered vessel operating over a regular route but with irregular sailings is not a tramp. The percentage of transoceanic freight carried by tramps was apparently larger in some of the ports of the Northwest than at San Francisco. But at San Francisco and Seattle, the two most important American ports on the Pacific, the proportion of freight carried by tramps was small.

trade. The withdrawal from business of the old Pacific Mail Steamship Company and the sale by that company of some of its steamers to the Toyo Kisen Kaisha in the fall of 1915[5] materially increased the hold of Japan upon the trans-Pacific trade. The general trend may be indicated by comparing the ownership and tonnage of "line" vessels operating in the transoceanic trade between China, Japan, and Asiatic Russia, on the one side, and the Pacific coast of Canada and the United States, on the other, in July, 1914, and May, 1916.[6]

TABLE 1.—OWNERSHIP AND TONNAGE OF TRANSOCEANIC TRADE BETWEEN CHINA, JAPAN, AND ASIATIC RUSSIA, AND THE PACIFIC COAST OF CANADA AND THE UNITED STATES.

JULY, 1914

	Number of steamers	Gross tonnage	Net tonnage	American ports of call
American flag—				
Pacific Mail	5	54,898	31,992	San Francisco
Great Northern	1	20,718	13,324	Seattle
Robert Dollar S. S. Co.	1	5,356	3,685	San Francisco
Total American	7	80,972	49,001	
British flag—				
Pacific Mail	2	10,244	8,929	San Francisco
Canadian Pacific	5	51,737	27,624	Vancouver
Royal Mail and Glen Line	8	47,039	29,774	Seattle, Tacoma, & Portland
Blue Funnel Line	3	29,423	18,781	Seattle & Tacoma
Robert Dollar S. S. Co.	2	8,633	5,602	San Francisco
Total British	20	147,076	90,710	
German flag—				
Hamburg-American Line	6	35,090[1]	22,582[1]	Seattle, Tacoma, & Portland
Japanese flag—				
Nippon Yusen Kaisha	6	38,106	23,235	Seattle
Toyo Kisen Kaisha	5	52,875	28,704	San Francisco
Osaka Shosen Kaisha	6	36,706	22,772	Seattle
Total Japanese	17	127,687	74,711	
Grand Total	50	390,825	237,004	

[1] Tonnage estimated for two steamers of Hamburg-American Line.

[5] Commerce Reports, October 16, 1915, p. 226.

[6] The names of companies are taken from the publications of the Bureau of

TABLE 2.—OWNERSHIP AND TONNAGE OF TRANSOCEANIC TRADE BETWEEN CHINA, JAPAN, AND ASIATIC RUSSIA, AND THE PACIFIC COAST OF CANADA AND THE UNITED STATES.

MAY, 1916

	Number of steamers	Gross tonnage	Net tonnage	American ports of call
American flag—				
China Mail	1	5,060	3,186	San Francisco
British flag—				
Canadian Pacific	4	45,803	24,570	Vancouver
Dollar Line	2	8,633	5,602	San Francisco
Blue Funnel Line . . .	3	29,423	18,781	Seattle & Tacoma
Total British	9	83,859	48,953	
Dutch flag—				
Java-China-Japan . . .	4	36,000	. . .	San Francisco
Japanese flag—				
Nippon Yusan Kaisha .	6	37,788	23,038	Seattle
Toyo Kisen Kaisha . . .	8	75,233[1]	41,998[2]	San Francisco & Los Angeles
Osaka Shosen Kaisha . .	7	49,511	30,569	Seattle
Total Japanese	21	162,532[1]	95,605[2]	
Grand Total	35	287,451[1]	147,744[3]	

[1] Including one steamer of the Toyo Kisen Kaisha whose gross tonnage is estimated.

[2] Including three steamers whose net tonnages are estimated.

[3] Including three steamers whose net tonnages are estimated and excluding the net tonnages of four steamers of the Java-China-Japan Line.

Of the aggregate of over 390,000 gross tons which was engaged regularly in trans-Pacific trade before the war, about 20 per cent sailed under the American flag, about 37 per cent under the British flag, and about 33 per cent under the Japanese flag. The gross tonnage of the vessels operated by the Hamburg-American Line was a little over 35,000, or less than 10 per cent of the total.

Foreign and Domestic Commerce, Miscellaneous Series, No. 44, for the year 1916, pp. 9-11. Vessel tonnages are those of Lloyd's Register of British and Foreign Shipping, List of American Merchant Vessels, published by the Bureau of Navigation, and in three or four cases rough estimates of tonnage on the basis of carrying capacity given in Miscellaneous Series, No. 44, above mentioned.

Tramps did not play a prominent part, and a liberal allowance for these vessels would probably not raise the total above 420,000 or 430,000 gross tons.

It is evident from the figures tabulated above that no nation could, in July, 1914, claim a predominant position in the trans-Pacific carrying trade. The gross tonnage of vessels flying the British flag (147,076, approximately 37 per cent of the total for line vessels) was greater than that of any other nation. Owing to the infrequent service of the Royal Mail and Glen Line and the rather small freight-carrying capacity[7] of the fast steamers of the Canadian Pacific, the proportion of the annual cargo-carrying capacity offered by British ships in the trans-Pacific trade was considerably smaller than its total gross tonnage. The estimated annual cargo-carrying capacity of all the vessels so engaged was at that time 1,400,000 tons. Of this regular carrying trade the American steamers had about 25 per cent, Japanese 26 per cent, and British 30 per cent.[8]

The total gross tonnage of vessels regularly operated in the trade in May, 1916, was approximately 287,000, or about 26 per cent less than the regular tonnage before the war. Of this tonnage, less than 2 per cent was American, 30 per cent British, 13 per cent Dutch, and over 55 per cent Japanese. Not only did the three great line companies of Japan engaged in the trans-Pacific service increase their proportion of the total gross tonnage, but they also augmented the number and tonnage of their steamers, while the tonnage of other nations (excepting the Dutch who became regular carriers after the opening of the war) materially declined or was withdrawn.

The predominance of Japan is still further accentuated by the increase in the number of tramp steamers. Since the outbreak of the war many tramp steamers have entered the field and are now carrying full and profitable cargoes.[9] It was estimated in the

[7] The gross or net tonnage of a vessel does not correspond to its cargo-carrying capacity. On fast steamers a large proportion of the space is likely to be devoted to passenger and mail service. The freight transported on such vessels is usually small in bulk and high in value.

[8] Miscellaneous Series, 1916, No. 44, p. 8.

[9] It is difficult to make any close estimate of the proportion of trans-Pacific freight carried in tramp vessels, as many "tramps" are operated for the present over definite routes. The writer was told at the foreign department of the Chamber of Commerce of San Francisco that about 75 per cent of the freight now passing through that port goes in chartered vessels or "tramps." However, a considerable part of this freight goes in steamers chartered by the regular line companies.

summer of 1916 that Japanese owners possessed some 272 tramp steamers aggregating 715,000 gross tons, of which 34 with a combined gross tonnage of 130,000 were operated in the trans-Pacific trade. This tonnage must be added to that of the regularly operated steamers of the three Japanese line companies above tabulated. While American tramps are operating in this transoceanic service, their number is relatively small. The addition of Japanese tramp steamers thus increases very materially Japan's predominant position.[10]

In August, 1916, the new Pacific Mail Steamship Company began its trans-Pacific service. Three steamers were purchased, the Ecuador, the Venezuela, and the Columbia. These vessels are now sailing under the American flag between San Francisco and the Orient. Each has a gross tonnage of 5,687.[11] The vice-president and general manager of the Pacific Mail Steamship Company is reported[12] to have recommended recently the immediate expenditure of $10,000,000 to $15,000,000 in the improvement of its trans-Pacific service, the money to be used in the purchase or construction of two 25,000-ton liners and two or three intermediate liners. The carrying out of these plans would go far toward restoring the American flag to the Pacific where a much larger proportion of our foreign trade had heretofore been carried in American vessels than on the Atlantic coast.

In addition to the Pacific Mail and China Mail, both operating vessels under the American flag, several American tramp steamers under time charters have appeared in this trade during the last two years. Other American ships, according to indications, are likely to operate in the near future. The entrance of the United States into the present European conflict may check this development and allow Japan to increase still further her hold on the trans-Pacific service.

The outbreak of the war caused a material reduction in the vessel tonnage regularly operating between the Orient and the Pacific coast of the United States and Canada. While this reduc-

10 This predominance is more strongly stated in Commerce Reports, 1915, No. 243, pp. 226 and 227. The Japanese tonnage available for the trans-Pacific trade is there given as 430,000 out of a total of 490,000. This figure, however, is in excess of the tonnage engaged *solely* in the trans-Pacific business, even including the tonnage operating between Japan and the Pacific coast of South America.

11 Annual Report of the Pacific Mail S. S. Co., 1916, p. 14.

12 *Seattle Post-Intelligencer,* March 31, 1917.

tion was offset in part by the increased number of tramps operating between the two coasts, the irregularity of tramp service has kept the annual cargo-carrying capacity somewhat below what it was before the war. The freight moved, however, has increased in value. A comparison of the exports and imports of the Pacific coast of the United States between the year closing June 30, 1914, and the year following will show approximately the extent of this increase for the United States during the first year of the war.[13]

Period	Imports	Exports including re-exports	Total
Year closing June 30, 1914	$138,478,715	$136,243,148	$274,721,863
Year closing June 30, 1915	158,858,408	173,685,617	332,544,025

Since June 30, 1915, the commerce of the Pacific coast has greatly increased, due in part to the exports to Asiatic Russia. During the first year of the war the exports from the United States to Siberia leaped from $1,214,506 to $23,353,151, more than one half of which was shipped through the Washington customs district.[14] During the first eight months of 1916 the shipments from Puget Sound ports alone to Vladivostok amounted to over $78,000,000.[15] The three most important items among these exports were commodities used largely for war purposes:

Upland cotton	$17,071,126
Gun powder	15,489,265
Other explosives	10,582,264
	$43,142,655

Much of this growth in trade represents increased values rather than increased freight tonnage. The fact remains, however, that on the Pacific coast the war conditions which produced a shortage of shipping facilities also contributed to an augmented demand for vessel tonnage.

The effect of this situation in the trans-Pacific shipping is noticeable in two directions—the industrial condition on the Pacific coast due to the lack of an adequate vessel tonnage, and the utilization by Japan of her predominant position in the transoceanic

[13] Figures taken from the volumes on *Commerce and Navigation of the United States* for the years 1914 and 1915.

[14] *Ibid.*

[15] *Seattle Times*, Oct. 5, 1916, Statement of Mr. W. B. Henderson, the Seattle representative of the Federal Bureau of Foreign and Domestic Commerce.

trade to give her own industries an artificial advantage in the commerce of the Pacific.

A large percentage of the commodities produced for export on the Pacific coast are of low value in proportion to bulk. In the year closing June 30, 1914, the fiscal year immediately preceding the war, the exports from all the customs districts of the Pacific coast of the United States aggregated $134,806,148.[16] Of this amount over half consisted of breadstuffs, wood and manufactures of wood, mineral oil, canned salmon, and fruit. The greater part of the remainder embraced articles shipped from eastern points to the Orient through Pacific coast ports. The groups of commodities mentioned are for the most part those which move readily only when rates are low. The increase in ocean rates following the outbreak of war greatly interfered with the industries producing some of these articles.

The leading manufacturing industries of the Pacific Northwest are the lumber and milling industries. During the first year of the war the exports of lumber from Washington and Oregon fell off about 50 per cent. The exports of lumber from the Pacific Northwest have in recent years gone principally to Australia, China, the west coast of South America, and to Europe. The secretary of the Pacific Lumber Bureau, an organization of Oregon, Washington, and British Columbia tidewater mills, recently made a report[17] showing the shipments of lumber from tidewater points within this area and the distribution of these shipments. His figures cover the first nine months of the year 1916 and the monthly shipments during several preceding years. A comparison between the first nine months of 1914 and of 1916 shows the following:

Destination	1914	1916
	(*M feet*)	(*M feet*)
Australia	155,138	71,158
West coast of South America	72,618	44,684
China	114,537	32,834
United Kingdom and continent	32,069	57,053

The shipments to all these destinations except Europe were much smaller in 1916 than in 1914. Of the shipments to the United

[16] *Commerce and Navigation of the United States*, 1914.

[17] *Seattle Times*, November 26, 1916.

Kingdom and Europe a large part was made by rail across the continent for reloading on vessels at New Orleans, New York, and Boston. This routing was due to the scarcity of vessel tonnage in the North Pacific waters.

In ordinary years the flour exported from Puget Sound and Portland goes to China and Japan. Owing to the high prices of breadstuffs, the shipments of flour from the Pacific Northwest remained large during the first year of the war.[18] The subsequent increase in rates and the more limited space offered by ocean liners have seriously handicapped the milling industry in this region of the country. One of the most prominent owners of flouring mills in the Northwest is quoted as saying:

> War conditions—presented most prominently in the shortage of carrying bottoms and the high cost of grains—are making the flour milling industry one of many troubles at present. The scarcity of shipping facilities is affecting this industry probably more than any other. . . . There is plenty of flour available, however, at the market price. After the flour is manufactured transportation to carry it to the many highly developed markets is practically unobtainable.[19]

Flour shipped from Puget Sound to China is allotted on Japanese liners only two fifths of the space formerly allowed.[20] The balance must seek markets elsewhere or go on chartered vessels at much higher rates.

The lumber produced in the Northwest is marketed for the most part in states and countries bordering on the Pacific Ocean or in the Rocky Mountain and western Mississippi Valley states. Shingles constitute the only important wood product of this region that is sold throughout the United States. Practically all the wheat flour produced in Washington and Oregon is ordinarily marketed in the Pacific coast states and in the Orient. The Oriental after adding the ocean freight charges on flour to the price prevailing on the Pacific coast now finds that price prohibitive.

Hence, both the milling industry and the lumber industry suffer from a greatly restricted market due to a limited vessel tonnage operating between the eastern and western coasts of the

[18] *Commerce and Navigation of the United States*, 1915. From Puget Sound the exports of flour increased in value from $8,349,400 for the year ending June 30, 1914, to $8,568,156 for the year ending June 30, 1915.

[19] *Seattle Times*, March 19, 1917.

[20] Testimony of W. B. Henderson in Hearings before the Committee on Merchant Marine and Fisheries, House of Representatives, 64 Cong., 1 Sess., first series, pp. 794 and 795.

Pacific. It is true that wheat produced in eastern Washington, Oregon, and Idaho is shipped by water in large quantities to foreign markets, but this export wheat nearly all goes by way of the Panama Canal to Europe, and does not figure to any large extent in the trans-Pacific trade.[21] On account of the depression which has prevailed in the lumber and milling industries, the Pacific Northwest has not been to any marked degree a participant in the "war prosperity" enjoyed by other sections of the United States.

Like conditions prevail elsewhere along the Pacific. Some months after the outbreak of the war the American consul at Victoria, British Columbia,[22] stated that certain kinds of exports which usually pay the lowest freights and which cannot now be profitably shipped on account of the higher charges are being severely restricted. "The high freight rates and lack of ships have been responsible for quite a set-back to the lumber business, and much complaint is voiced by the lumber interests on that account." On the other side of the Pacific the depression of certain industries due to increased freight rates is a matter of widespread complaint. Throughout the Orient there is a clamor for space on vessels going to the United States and the United Kingdom. The rates on sugar and hemp from the Philippines to the United States were raised during the first year of the war from $7.50 and $15 per ton, respectively, to $20 and $45.[23] Nominal rates below the latter were quoted by conference lines, but shippers were notified that tonnage could not be provided.

On Chinese foreign trade the immediate effect of the European war was complete paralysis. Export trade, however, is not so vital a factor of economic life in China as in countries more highly developed industrially. The exports of this country consist of raw materials and products of the soil rather than manufactured goods. All the industries producing these commodities were affected, to the extent that they were dependent upon foreign markets, by the increase in ocean freight rates. But conditions rapidly readjusted themselves, and within a few months there began to spring up a demand for materials to be used in connection with the war and for articles formerly supplied to neutral

[21] The writer has discussed the effect of changes in the price of wheat on the milling industry of Washington in an article in the *Political Science Quarterly*, September, 1909.

[22] Daily Consular and Trade Reports, 1915, No. 54, p. 923.

[23] Daily Consular and Trade Reports, 1915, No. 95, pp. 386 and 387.

nations by the belligerent powers that were no longer able to furnish them. There was an increased demand for Chinese cotton, antimony, albumen, aniline dyes, indigo paste, egg products, hides, skins, straw braid, pig iron, wool, and silks. The abolition of the use of alcoholic drinks in Russia increased the demand for Chinese tea.[24] Most of these products, being of smaller bulk in proportion to value than many of the former exports of China, were able to bear the increased rates, and are now exported in large quantities to the United States as well as to European countries.

The effect of the reduction of shipping facilities in the trans-Pacific trade has thus been a depressing one on most industries producing commodities whose movement depends upon low or moderate rates. Where such industries dominate as they do in the Pacific Northwest there has been business depression.[25] Another, though subordinate, factor in this situation is the relationship existing between the transcontinental railroads of the United States and the transoceanic steamship lines. The latter usually favor large and regular shippers in the matter of rates and service. Regular shippers will secure space allotments in preference to those shipping at irregular intervals. The transcontinental railroads as regular shippers have an understanding with the Japanese lines for practically all their space. The local exporter has been left out of the deal, and hence must either go out of business or fall back on chartered vessels with their much greater advances in rates.[26]

The predominant position of Japan in the trans-Pacific trade is apparently being utilized to foster her industries. The advances in ocean freight rates by the Japanese lines engaged in this service are noticeably different for commodities moving east and for those moving west. These advances are, in the main, on American freight moving to the Orient rather than on Japanese goods carried to America. In fact, the increase in rates on Japanese freight, while appreciable, has been slight compared with the rise in ocean

[24] Bureau of Foreign and Domestic Commerce, Miscellaneous Series, No. 44, p. 12.

[25] The wheat farmers of eastern Washington, Oregon, and Idaho have shared in the country's prosperity as have wheat farmers elsewhere. The high price of wheat in European markets enables wheat dealers in Tacoma, Seattle, and Portland to meet the high freight charges.

[26] Testimony of W. B. Henderson in Hearings before Committee on Merchant Marine and Fisheries, H. R. 64 Cong., 1 Sess., pp. 794 and 795.

transportation costs generally. In all advances of rates by Conference Lines on the Pacific the government of Japan, controlling the policies of the leading Japanese lines by the payment of subsidies, has prevented any very marked increase in rates on commodities in whose production Japan is interested.[27] In other words, these lines by virtue of the subsidies paid them are to control transportation charges in the interest of Japanese trade.

In the following table a comparison is made between the advances in quoted rates on some of the principal Japanese exports to the United States and some of the leading American exports to the Orient. While the published tariffs of steamship lines do not in all cases represent the actual charges imposed, they do serve as a rough index of what the shipper has to pay. In the case of freight moving east on the Pacific, the rates are those from the

TABLE 3.—FREIGHT RATES FROM JAPAN TO AMERICA.

Commodities	Before the war[1]	Effective April 1, 1916[2]
Silk (raw or spun) in bales . .	$0.03 per lb. net	$0.036 per lb. net
Silk goods, in cases	15.00 M[3] (+ ½% ad valorem)	18.00 M (+ ½% ad valorem)
Tea	5.50 M, net	6.60 M, net
Copper, in slabs	4.50 W	5.40 W
Copper, raw	3.00 W	4.00 W
Linen goods, provided declared value does not exceed $900 per ton	7.50 M	9.00 M
Porcelain, with declared value not exceeding $100 per 40 cubic feet	6.50 W/M	7.80 W/M
Camphor (refined) in tins . .	10.50 M	12.60 M
Camphor (crude)	8.50 M	10.20 M
Matting, in rolls	5.50 M	6.60 M

[1] Trans-Pacific Tariff Bureau (Japan Branch), Freight Tariff No. 3, Yokohama, May 15, 1913.

[2] Tariff of Nippon Yusen Kaisha. Effective April 1, 1916. Announcement of a further increase of from 20 to 30 per cent in some of these rates has just been made at the offices of the three Japanese lines (*Seattle Times*, April 17, 1917). The announcement, however, does not materially change the situation with reference to the rates on Japanese and non-Japanese products.

[3] Ocean freight rates are usually quoted by the ton. The freight ton, however, may be a measurement ton of 40 cubic feet of space or a weighted ton of 2,000 pounds. If the former, the rate is often quoted as so much per M; if the latter so much W. If the option of using one or the other standard is left with the steamship company the quotation is often so much W/M.

[27] Commerce Reports, 1915, No. 243, p. 226.

Japanese ports of Nagasaki, Moji, Kobe, Yokkaishi, Shimidzu, and Yokohama to the American (including Canadian) ports of Victoria, Vancouver, Seattle, Tacoma, and San Francisco. In the reverse direction the rates apply to the American ports named, except San Francisco in the case of the rates effective November 2, 1914, and the Japanese ports of Yokohama, Kobe, Nagasaki, and Moji, the Chinese port of Shanghai, Hongkong, and Manila, P. I.

TABLE 4.—FREIGHT RATES FROM AMERICA TO THE ORIENT.

Commodities	Effective Nov. 2, 1914[1]	Effective Dec. 1, 1916[2]	
		Yokohama, Kobe Moji, Nagasaki	Shanghai, Hongkong, Manila
Cotton (raw), machine compressed	$8 W	$18 W/M	$20 W/M
Machinery, single package not exceeding 4,000 lbs.	8 W	18 W	20 W
Iron and steel articles	4 to 10 W	20 W	20 W
Leather in rolls	15 W	15 M	18 M
Canned goods in cases	7 W[3]	18 or 20 W[4]	20 or 22 W[5]
Grain and grain products (not including wheat and flour)	5 to 10 W/M	18 W/M	20 W/M

1 Pacific Coast-Oriental Tariff Bureau, Freight Tariff No. 13. The rates in this tariff while higher than those prevailing before the war are still low compared with those of 1916 or 1917. The big advances early in the war were made by tramp vessels rather than by the regular liners.

2 Pacific Coast-Oriental Tariff Bureau, Joint Tariff No. 14. The rates in this tariff apply to shipments from San Francisco as well as the more northern ports.

3 The rate to Hongkong and Manila is $8.

4 If strapped at both ends, $18; if unstrapped, $20.

5 If strapped at both ends, $20; if unstrapped, $22.

The rate on flour which is one of the most important exports of the United States to Japan and China is not quoted in the general tariffs. Before the war $5 a ton was considered a high rate to either of these countries. Early in 1917 a special tariff quoted a rate of $15 a ton to Japanese and Chinese ports and $17 to Manila.[28] Charter rates on flour were quoted at $20 per ton to Japan and $25 to Vladivostok.[29] Rates on lumber, which generally goes in chartered vessels or in vessels owned by lumber companies, are not quoted in the general tariffs. A special tariff pub-

28 *Seattle Times*, Feb. 25, 1917.

29 Letter at Seattle office of Bureau of Foreign and Domestic Commerce.

lished in February, 1917, gives a rate of $25 per thousand board feet to Japan, China, and Manila. Before the war $12 per thousand board feet was a common rate.[30]

It will be noted that the advance in rates on commodities moving from Japan to the Pacific coast of North America has been relatively slight; on the articles quoted no advance was greater than 33⅓ per cent.[31] Raw silk, which in the fiscal year immediately preceding the war formed about 66 per cent of the value of our entire imports from Japan, shows an increase of only 20 per cent. Tea, which ranks next to raw silk in importance, and silk goods show the same percentage of increase.

On commodities moving from the United States and Canada to China and Japan there are few rate advances of less than 100 per cent between November, 1914, and December, 1916. On important articles of commerce the increase in rates is from 100 to 300 per cent. Because of the demand for vessel space the actual advances are in many cases greater than those indicated in the published tariffs. By November, 1914, ocean freight rates on the Pacific had shown material advances, and hence the total increase between the period immediately preceding the war and December, 1916, is greater than that shown in the above table. On flour the special tariffs show an increase of 200 per cent when carried by regular line vessels and a greater increase when moved by chartered vessels. The transportation charge on raw cotton advanced from 125 to 150 per cent between November, 1914, and December, 1916.

The difference in the upward movement of rates between commodities moving east and those moving west may be considered in relation to the westward diversion of traffic due to war conditions. As already pointed out, the exports from Puget Sound to Asiatic Russia have enormously increased during the past two years. Practically no freight at present moves from Asiatic Russia to the Pacific coast of the United States. The westward movement from Japan to Europe has also increased. On account of the preponderance of the westward over the eastward movement, the Nippon Yusen Kaisha has started a round-the-world service from the Far East to London via Hongkong, thence returning to the Orient via

[30] *Seattle Times*, Feb. 25, 1917.

[31] The advance is greater in the case of some commodities than the quoted rates would indicate. Before the war the commodities enumerated, with the exception of raw silk, silk goods, and tea, were subject to a deferred rebate of $1 per ton weight or measurement. This rebate, the writer was told, has been discontinued since the war began.

the Panama Canal and the Pacific coast of the United States.[32] The company employs ten ships of 69,000 tons in this round-the-world freight service.[33]

Notwithstanding the heavy westward movement of freight it can hardly be said that the relatively small advances in rates from Japan to the United States on the great Japanese liners are to be looked upon in the light of low rates for return cargoes. Aside from the heavy shipments to Vladivostok, from which little or no return freight is carried, the trans-Pacific traffic shows a larger movement from the Orient to the Pacific coast of the United States than in the reverse direction. Rates from Hongkong and Manila on line steamers not touching Japan have advanced almost as much as those on freight from America to the Orient.[34] With the exception of raw silk, whose transportation charge has increased from 3 to 4 cents per pound, the advances have been from one hundred to several hundred per cent.

The moderate increase in rates on Japanese products going on subsidized liners across the Pacific has the appearance of a conscious effort to foster by discriminatory charges home industries. The comparatively high rates on commodities destined for the Orient act as a sort of protective tariff, while the low rates on Japanese products combined with high prices in the world market practically amount to indirect bounties on her exports. With her predominant position on the Pacific Japan is apparently using her large mercantile fleet to increase her export trade and develop the industries serving this trade. The reduced allotment of vessel space for flour shipments from the Pacific Northwest to China, already referred to, is in accordance with this policy. It is commonly asserted and believed that this reduction is made in the interest of the milling industry of Japan which is gradually capturing the Chinese markets.[35]

Discriminatory rates in favor of the country under whose flag a vessel sails are not uncommon. British vessels operating between New Zealand and New York and London have recently quoted lower rates on New Zealand products shipped to London than on those shipped to New York, although the latter port is nearer to

[32] Commerce Reports, 1915, No. 220, p. 1370.

[33] *Ibid.*, p. 1371.

[34] Trans-Pacific Tariff Bureau, Hongkong, Local Freight Tariff, No. 2 A. Effective January 15, 1916.

[35] Testimony of W. B. Henderson before House Committee on Merchant Marine and Fisheries, H. R. 64 Cong., 1 Sess., pp. 794 and 795.

New Zealand and until April, 1917, was a neutral port entirely without the war zone. This discrimination in favor of London has persisted whether the vessel sails directly to New York and thence to London or to New York via London.[36] While this instance is a case of discriminatory rates on imports to a home port as against a foreign port more favorably situated, the protective effect is none the less apparent. In this illustration there is no conscious effort on the part of the English government to favor home industries. Japan, however, seems to have taken advantage of her position as the dominant carrier in the trans-Pacific commerce to develop her export trade in true mercantilistic fashion.

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[36] Commerce Reports, 1915, No. 281, p. 857. Note quoted rates on kauri gum.